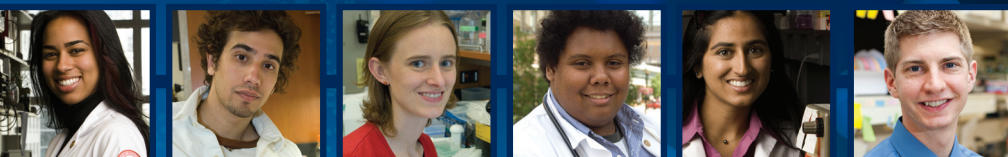


National Institute of General Medical Sciences
MEDICAL SCIENTIST TRAINING PROGRAM SYMPOSIUM

50 Years of Training Physician-Scientists



Thursday
July 17, 2014
8:00 a.m.—12:00 p.m.

Masur Auditorium
Clinical Center (Building 10)
National Institutes of Health



National Institute of
General Medical Sciences

About the Medical Scientist Training Program

In 1964, the National Institute of General Medical Sciences established the Medical Scientist Training Program (MSTP) to provide the biomedical research community with investigators well trained in both basic science and clinical research. The first awards went to Albert Einstein College of Medicine, New York University and Northwestern University and supported a handful of students at each institution. Over the past 50 years, the program has grown to 45 institutions and more than 900 trainees per year. MSTP students participate in an integrated program of training leading to the combined M.D.-Ph.D. (or other dual) degree. After completing a medical residency and fellowship, most trainees find positions in academic medicine, establish research careers and successfully compete for NIH funding.

AGENDA

Welcoming Remarks and Introductions

Judith H. Greenberg, Ph.D.

Acting Deputy Director
National Institute of General Medical Sciences

Peter C. Preusch, Ph.D.

MSTP Program Director
National Institute of General Medical Sciences

Ogden Syndrome and the Amino-Terminal Acylation of Proteins

Gholson J. Lyon, M.D., Ph.D.

Assistant Professor
Cold Spring Harbor Laboratory
Research Scientist
Utah Foundation for Biomedical Research

Engineering Gene Control Devices to Study Malarial Parasites

Jacquin C. Niles, M.D., Ph.D.

Pfizer-Laubach Associate Professor of Biological Engineering
Massachusetts Institute of Technology

The Role of STAT6 Modulation of Natural and Inducible Tregs During Allergic Lung Inflammation

Nicolas Johnson Dorsey, Ph.D.

UNCF•Merck Graduate Fellow
University of Maryland, Baltimore

Great Training, Good Karma, and the CARMA-Bcl10-MALT1 Signalingosome

Linda M. McAllister-Lucas, M.D., Ph.D.

Chief, Division of Pediatric Hematology/Oncology
Director, Pediatric Hematology/Oncology Fellowship Program
Associate Professor of Pediatrics
University of Pittsburgh School of Medicine
Children's Hospital of Pittsburgh of the
University of Pittsburgh Medical Center

Break

Methodological and Applied Questions in Outcomes Research: An MSTP Journey

Jerome Federspiel, Ph.D.

M.D.-Ph.D. Student
Adjunct Assistant Professor of Health Policy
and Management
University of North Carolina at Chapel Hill

Controlling Signal Transduction by the T-Cell Antigen Receptor

Arthur Weiss, M.D., Ph.D.

Ephraim P. Engleman Distinguished Professor
of Rheumatology
University of California, San Francisco
Investigator, Howard Hughes Medical Institute

Comments

Francis S. Collins, M.D., Ph.D.

Director
National Institutes of Health

Darrell G. Kirch, M.D.

President and CEO
Association of American Medical Colleges

Perspectives on the MSTP Program: Historical Recollections and Data Presentations

Peter C. Preusch, Ph.D.

Clifford V. Harding, M.D., Ph.D.

Kahn Professor and Chair of Pathology
MSTP Director
Case Western Reserve University
University Hospitals Case Medical Center

Report of the Advisory Committee to the Director, NIH, and Discussion: Future Directions

Sherry Mills, M.D., M.P.H.

Director
Office of Extramural Programs, Office of Extramural Research
National Institutes of Health

SPEAKER BIOGRAPHIES



Francis S. Collins, M.D., Ph.D.

Dr. Collins is the director of the National Institutes of Health. In that role, he oversees the work of the largest supporter of biomedical research in the world, spanning the spectrum from basic to clinical research. Collins is a physician-geneticist noted for his landmark discoveries of disease genes and his leadership of the international Human Genome Project, which culminated in April 2003 with the completion of a finished sequence. He served as director of the National Human Genome Research Institute at NIH from 1993 to 2008. Before coming to NIH, Collins was a Howard Hughes Medical Institute investigator at the University of Michigan. He is an elected member of the Institute of Medicine and the National Academy of Sciences, was awarded the Presidential Medal of Freedom in November 2007 and received the National Medal of Science in 2009.



Darrell G. Kirch, M.D.

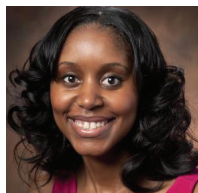
Dr. Kirch is president and CEO of the Association of American Medical Colleges (AAMC), which represents the nation's medical schools, teaching hospitals and academic societies. Kirch speaks and publishes widely on the need for transformation in the nation's health care system and how academic medicine can lead that change across medical education, medical research and patient care. Prior to becoming AAMC president in 2006, Kirch served as the dean and academic health system leader of the Medical College of Georgia and of the Penn State Milton S. Hershey Medical Center. He serves as chair of the Washington Higher Education Secretariat and the Department of Veterans Affairs Special Medical Advisory Group and is a member of the Institute of Medicine of the National Academies. A psychiatrist and clinical neuroscientist by training, Kirch began his career at the National Institute of Mental Health, becoming the acting scientific director in 1993 and receiving the Outstanding Service Medal of the United States Public Health Service.



Sherry Mills, M.D., M.P.H.

Dr. Mills directs the NIH Office of Extramural Programs, Office of Extramural Research (OER). She began her career as a medical epidemiologist at the Centers for Disease Control and Prevention's Office on Smoking and Health. In 1991, Mills joined the National Cancer Institute, where she held several extramural program leadership roles. In 2000, she joined Abt Associates, a Cambridge-based consulting firm, as the managing vice president for public health applications and research. In 2005, Mills rejoined NIH in the OER. She has been recognized with many awards both in government and the private sector for her outstanding contributions to public health interventions, public health policy, mentorship and outreach. She serves as co-chair of the NIH Advisory Committee to the Director's Working Group on the Physician-Scientist Workforce.

CURRENT AND FORMER MSTP TRAINEE PROFILES



Nicolas Johnson Dorsey, Ph.D.

TRAINED AT: University of Maryland, Baltimore, class of 2015

MSTP DIRECTOR: Michael Donnenberg, M.D.

THESIS MENTOR: Achsah Keegan, Ph.D.

THESIS TOPIC: The role of STAT6 in modulating regulatory T cells in vivo during allergic lung inflammation



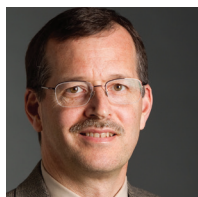
Jerome Federspiel, Ph.D.

TRAINED AT: University of North Carolina at Chapel Hill, class of 2015

MSTP DIRECTOR: Eugene Orringer, M.D.

THESIS MENTOR: Morris Weinberger, Ph.D.

THESIS TOPIC: Observational methods for cardiovascular outcomes research



Clifford V. Harding, M.D., Ph.D.

TRAINED AT: Washington University in St. Louis, class of 1984

MSTP DIRECTOR: Luis Glaser, Ph.D.

THESIS MENTORS: Philip Stahl, Ph.D., and John Heuser, M.D.

THESIS TOPIC: Receptor-mediated endocytosis of transferrin and recycling of the transferrin receptor

PAST POSITIONS: Assistant professor of pathology, Washington University in St. Louis; founding director, Case Western Reserve University immunology training program



Gholson J. Lyon, M.D., Ph.D.

TRAINED AT: Weill Cornell Medical College-Rockefeller University, class of 2004

MSTP DIRECTOR: Olaf Andersen, M.D.

THESIS MENTORS: Tom Muir, Ph.D., and Richard Novick, M.D.

THESIS TOPIC: Targeting receptor-histidine kinase signaling in *Staphylococcus aureus*

PAST POSITIONS: Assistant professor, department of psychiatry, University of Utah; adjunct assistant professor, department of child and adolescent psychiatry, New York University Child Study Center



Linda M. McAllister-Lucas, M.D., Ph.D.

TRAINED AT: Vanderbilt University, class of 1996

MSTP DIRECTOR: Daryl K. Granner, M.D.

THESIS MENTOR: Jackie D. Corbin, Ph.D.

THESIS TOPIC: Cloning and characterization of cGMP-binding, cGMP-specific phosphodiesterase (PDE5)

PAST POSITIONS: Assistant and associate professor of pediatrics, Division of Pediatric Hematology/Oncology, University of Michigan Medical School; MSTP associate director, University of Michigan



Jacquin C. Niles, M.D., Ph.D.

TRAINED AT: Harvard University, class of 2002

MSTP DIRECTOR: Dennis A. Ausiello, M.D.

THESIS MENTOR: Steven R. Tannenbaum, Ph.D.

THESIS TOPIC: Chemical characterization of the peroxynitrite-induced guanine and 8-oxoguanine reaction products

PAST POSITIONS: NIH postdoctoral fellow, department of chemistry, University of California, Berkeley; visiting scientist, department of biological engineering, Massachusetts Institute of Technology



Arthur Weiss, M.D., Ph.D.

TRAINED AT: University of Chicago, class of 1979

MSTP DIRECTOR: Joseph Ceithaml, Ph.D.

THESIS MENTOR: Frank Fitch, M.D., Ph.D.

THESIS TOPIC: Regulation of cytolytic T lymphocyte generation in rat transplantation immunity

PAST POSITIONS: Chief, Division of Rheumatology, and MSTP director, University of California, San Francisco

NIGMS Mission

The National Institute of General Medical Sciences (NIGMS) supports basic research that increases understanding of biological processes and lays the foundation for advances in disease diagnosis, treatment and prevention. NIGMS-funded researchers investigate how human and other living systems work at a range of levels, from molecules and cells to tissues, whole organisms and populations. To assure the vitality and continued productivity of the research enterprise, NIGMS also provides leadership in training the next generation of scientists, in enhancing the diversity of the scientific workforce, and in developing research capacities throughout the country. For more information, see <http://www.nigms.nih.gov>